Application No.: 09/495,668 Form 1449 (Modified) Atty Docket No: MXGNP002X1 **Information Disclosure** Applicant: RECEIVED **Statement By Applicant** Selifonov et al. SEP 18 2002 Filing Date Group SEP 2 0 1002 Use Several Sheets if Necessary) February 1, 2000 1631

U.S. Patent Documents

TECH CENTER 1600/2900

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
12	Al	6,125,331	9/26/00	Toh			
	A2	6,403,312	6/11/02	Bassil, et al			
	A3						·

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication	Country or		Sub-	Trans	slation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
-11	Bl	WO00/47612	8/17/00	WIPO				
	B2	WO01/61344	8/23/01	WIPO		5		
	B3	WO00/42559	7/2/00	WIPO		-		
\overline{v}	B4	WO01/75767	10/11/01	WIPO		->		1

Other Documents

		Otter Documents
Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
Ni	C1	Young et al., "Characterization of Receptor Binding Determinants of Granulocyte Colony Stimulating Factor," <i>Protein Science</i> 6:1228-1236, 1997
	·C2	Dahiyat and Mayo, "Protein Design Automation," Protein Science, 5:895-903, (1996)
	C3	Su et al., "Coupling Backbone Flexibility and Amino Acid Sequence Selection in Protein Design," Protein Science, 6:1701-1707, (1997)
:	C4	Voigt et al., "Computationally Focusing the Directed Evolution of Proteins," Journal of Cellular Biochemistry Supplement, 37:58-63 (2001)
	C5	Hellberg et al., "Minimum Analogue Peptide Sets (MAPS) for quantitative Structure-Activity Relationships," Int. J. Peptide Protein Res. 37:414-427 (1991)

SEP 2 0 2002



TECH CENTER 1600/2900

Form 1449 Modified D	Atty Docket No. MXGNP002X1	Application No.: 09/495,668
Information Disclosure Statement By Applicant	Applicant: Selifonov et al.	
(Use Several Sheets if Necessary)	Filing Date February 1, 2000	Group 1631

		C6	Martin van Heel, "A New Family of Powerful Multivariates Statistical
2	U		Sequence Analysis Techniques," J. Mol. Biol, 220:877-887 (1991)
		C7	Goldman et al., "Estimating Protein Function From Combinatorial Sequence Data Using Decision Algorithms and Neural Networks," Drug Dev. Research 33:125-132 (1994)
		C8	Gustafsson et al., "Exploration of Sequence Space for Protein Engineering," J. Mol. Recognit. 14:308-314 (2001)
		C9	Miyazawa et al., "Residue-Residue Potentials with a Favorable Contact Pair Term and an Unfavorable High Packing Density Term, for Simulation and Threading," J. Mol. Biol., 256:623-644 (1996)
		C10	Chao Zhang, "Extracting Contact Energies From Protein Structures: A Study Using a Simplified Model," Proteins: Structure, Function, and Genetics, 31:299-308 (1998)
		C11	Miyazawa et al., "Self-Consistent Estimation of Inter-Residue Protein Contact Engergies Based on an Equilibrium Mixture Approximation of Residues," Proteins: Structure, Function, and Genetics, 34:49-68 (1999)
		C12	
		C13	Moore et al., "Predicting Crossover Generation in DNS Shuffling," PNAS, Vol. 98, No. 6, 3226-3231 (2001)
		C14	Lehman et al., "Engineering Proteins for Thermostability: the Use of Sequence Alignments Versus Rational Design and Directed Evolution," Current Opinion in Biotechnology, 13:371-375 (2001)
		C15	
		C16	H.W. Hellinga, "Rational Protein Design: Combining Theory and Experiment," Proc. Natl. Acad. Sci. USA, Vol. 94, pp. 10015-10017, (1997)
		C17	

RECEIVED

SEP 2 0 2002

TECH CENTER 1600/2900

Atty Docket No.	Application No.:
MXGNP002X1	09/495,668
Applicant:	
Selifonov et al.	
Filing Date	Group
February 1, 2000	1631
	MXGNP002X1 Applicant: Selifonov et al. Filing Date

	C18	Jonsson, et al, "Quaintitative Sequence-Activity Modeils (QSAM)- Tool For					
2/2		Sequence Design", Nuclear Acid Research Vol. 21, No. 3, pp. 733-739 (1993)					
	C19	Sjostrom, et al, "Signal Peptide Amino Acid Sequences In Escheruchua coli					
1 1		Contain Information Related To Final Protein Localization. A Multivariate					
		Data Analysis", The CMBO Journal vol. 6, no. 3, pp 823-831, (1987)					
	C20	Patel, et al, "Patenting Computer-Designed Peptides", Journal Of Computer-					
		Acid Molecular Design 12 pp543-556, (1998)					
1 1	C21	, , , , , , , , , , , , , , , , , , , ,					
1 \		Computer-Based Evolutionary Search", Proc. Natl. Acad. Sci. USA, vol. 95,					
		pp. 12179-121184, October 1998					
	C22	1					
		Optimal Design QSAR and a Combinatorial Search Algorithm", J Peptide					
	1	Res. 49, pp. 89-102, (1997)					
	C23	Bogarad, et al, "A Hierarchical Approach to Protein Molecular Evolution",					
		Proc. Natl. Acad. Sci. USA, Vol. 96, pp. 2597-2595, March 1999					
	C24	Darius, et al, "Simulated Molecular Evolution" Or Computer-Generated					
		Artifacts?", Biophysical Journal, Vol. 67, pp. 2120-2122, November 1994					
Examine	r	Date Considered					
		24-08					
	77						

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

m 1449 (Modified) Atty Docket No. Application No.: MXGNP002X1/0159.210US 09/495,668 Information Disclosure Applicant: **Statement By Applicant** Selifonov et al. Filing Date Group (Use Several Sheets if Necessary)

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
	A1		120.0	Tutontee	Class	Class	Date
	A2					 	
	A3					 	
	A4						
	A5						

February 1, 2000

1637

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication			Sub-	Tran	slation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
	B1						 	1
	B2					 	 	
-	B3							
	B4	·				_		
	B5						1	

Other Documents

		O THE S OF THE S		
Examiner				
Initial No. Author, Title, Date, Place (e.g. Journal) of Publication				
	CI	Martin et al., "Measuring Diversity: Experimental Design of Combinatorial Libraries for Drug Discovery," J. Med. Chem. 38, 1431-1436, 1995		
	C2	Sheridan et al., "Using a Genetic Algorithm to Suggest Combinatorial Libraries," J. Chem. Inf. Compu. Sci., 35, 310-320, 1995		
	C3	D.K. Agrafiotis, "Multiobjective Optimization of Combinatorial Libraries," IBM J. Res & Dev., Vol, 45, No. 3, 545-566, 2001		
Examiner		Date Considered		

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified)

It i 3 2004

Information Disclosure

Atty Docket No.

MXGNP002X1/0

Applicant:

Atty Docket No. Ap MXGNP002X1/0159.210US 09/

Application No.: 09/495,668

Applicant: Selifonov et al.

Filing Date Gro

(Use Several Sheets if Necessary)

PADE Statement By Applicant

February 1, 2000

Group 1637

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub- class	Filing Date
M	Al	6,537,776 B1	03/25/03	Short	435	69.1-	06/14/99
	A2	6,605,449 B1	08/12/03	Short	435	69.1	06/14/00

Other Documents

			Other Documents				
Exam	iner						
Initial No. Author, Title, Date,		No.	Author, Title, Date, Place (e.g. Journal) of Publication				
		Cl	SELIFONOV, Sergey A. et al., "Methods For Making Characteristics Strings,				
11			Polynucleotides And Polypeptides Having Desired Characteristics", U.S.				
			Patent Application No. 09/416,375, Filed 10/12/1999 (Our Dkt. MXGNP001)				
		C2	SELIFONOV, Sergey A. et al, "Methods For Making Character Strings,				
			Polynucleotides And Polypeptides Having Desired Characteristics", U.S.				
	<u> </u>		Patent Application No. 09/494,282, Filed 1/18/2000 (Our Dkt. MXGNP001X1				
	1	C3	SELIFONOV, Sergey A. et al., "Methods For Making Characteristics Strings,				
	l		Polynucleotides And Polypeptides Having Desired Characteristics", U.S.				
			Patent Application No. 09/539,486, Filed 3/30/200 (Our Dkt. MXGNP001X2)				
	l	C4	i i i i i i i i i i i i i i i i i i i				
			Polynucleotides And Polypeptides Having Desired Characteristics", U.S.				
			Patent Application No. 09/618,579, Filed 7/18/2000 (Our Dkt. MXGNP001X3)				
		C5	SELIFONOV, Sergey A. et al. "Methods For Making Characteristics Strings,				
			Polynucleotides And Polypeptides Having Desired Characteristics", PCT				
			Application No. PCT/US00/01202, Publication No. WO 00/02560 (Our Dkt.				
			MXGNP001X3WO)				
		C6	SELIFONOV, Sergey A. et al. "In Silico Cross-Over Site Selection", PCT				
'			Application No. PCT/US01/10231, Publication No. WO 01/75767 A3 (Our				
	<u> </u>		Dkt. MXGNP001X4WO)				
Exami	iner	\sim	Date Considered				
		7	2-4-05				
Even	-/_ T		citation considered. Draw line through citation if not in confirmance and				

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.